Nicholas Freeman Mehrle

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Education

Johns Hopkins University — **Baltimore, MD**
M.A. Physics and Astronomy — May 2016
B.S. Physics — May 2016
- **Additional Majors:** Mathematics & Applied Mathematics and Statistics
- **GPA:** 3.91/4.0

Employment & Research

Optiver US LLC — **Chicago, Il**
Derivatives Trader — July 2016 - Present
- Worked as high frequency options market maker
- Performed time series analysis of market data

Johns Hopkins University — **Batimore, MD**
Research Assistant - Department of Physics and Astronomy — May 2013 - May 2016
- Constructed variable delay polarization modulator for microwave band telescope
- Wrote master's thesis on telescope design and physics of Cosmic Microwave Background

CERN — **Geneva, Switzerland**
Research Assistant - CMS Experiment — Jan - May 2015
- Performed statistical analysis to discriminate production methods of Higgs boson
- Contributed to statistical software package used on the CMS experiment

Johns Hopkins University Applied Physics Lab — **Laurel, MD**
Technical Intern - Applied Concepts and Technology Group — May - Aug 2014
- Developed and tested of feature estimation algorithms
- Improved graphical UI of large scale simulation environment

Johns Hopkins University — **Baltimore, MD**
Teaching Assistant - Department of Mathematics — Sept - Dec 2015
- Taught recitation section for Differential Equations

Papers

- *Design of the Cosmology Large Angular Scale Surveyor (CLASS) Polarization Modulators*. Master's thesis. Advisor: Tobias Marriage.
- *CLASS: The Cosmology Large Angular Scale Surveyor*. With Thomas Essinger-Hileman et al. arXiv reference: 1408.4788.
- *The Cosmology Large Angular Scale Surveyor (CLASS): 38 GHz detector array of bolometric polarimeters*. With John W. Appel et al. arXiv reference: 1408.4789.

Miscellaneous

Computer Skills: Python, Java, JavaScript, C, C++, Matlab, Mathematica, R, HTML CSS, LaTeX, SolidWorks, VBA
Organizations: Phi Beta Kappa, Sigma Pi Sigma, Johns Hopkins Mock Trial, Wading Team
Testing: Physics GRE - 960/990 (91st percentile)